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NES-HFC-USA

NES Hands Free™

INSTRUCTION MANUAL

Nintendo®

NINTENDO OF AMERICA INC.
P.O. BOX 957, REDMOND, WA 98052

PRINTED IN U.S.A.

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This official seal is your assurance that Nintendo has reviewed this product and that it has met our standards for excellence in workmanship, reliability and entertainment value. Always look for this quality seal when buying games and accessories to ensure complete compatibility with your Nintendo Entertainment System.

Official Nintendo Seal of Quality ™

SECTION 1

NES HANDS FREE INSTRUCTION MANUAL

Congratulations on your purchase of the NES HANDS FREE™, the first controller for the NINTENDO ENTERTAINMENT SYSTEM® that will allow complete control of video games without the use of hands. The NES HANDS FREE CONTROLLER (HFC) has all of the same functions as the standard controller, plus some additional features that make it even better.

To play with the NES Hands Free, you need:

1. The NINTENDO ENTERTAINMENT SYSTEM® (NES) Control Deck™.
2. Any NINTENDO GAME PAK except the Light Gun or Power Pad™ series.

IMPORTANT

- Please read all of the set-up and operation instructions carefully before using your NES Hands Free or attempting to connect it to the NES. Refer to the Control Deck™ manual if you need to connect the NES to your TV. If after reading all of the instructions you have questions or problems, please call our Consumer Service Department at the following number:

NEED HELP?

Nintendo Consumer Assistance Telephone Hotline

Call: 1-800-255-3700

Monday through Saturday, 4:00 A.M. to 10:00 P.M. Pacific Time.

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HOW THE NES HANDS FREE WORKS

The HFC simulates all of the button functions found on the standard NES Controller by a combination of two methods. The first is with a Sip and Puff tube. By sipping or puffing, you can activate the A, B, Select and Start "buttons." A slight amount of sipping or puffing will activate the A and B, and by sipping or puffing harder, the Select and Start are activated. The amount of pressure needed (how hard you must sip or puff) to use the Select and Start is adjustable with two front-mounted knobs.

The second method used by the HFC to simulate the standard controller is with a chin-controlled joystick. The joystick is mounted on the end of an adjustable arm which can be set into many different positions. It works the same way as a regular joystick or "control pad" like the one on the NES Controller, but needs only slight movement of your head or jaw to move the video characters while playing a game. The HFC itself is worn on the chest and is designed to fit a variety of needs by using the adjustable collar strap and optional chest strap provided.

Together with its other features, the NES Hands Free Controller can easily be set up to play almost all of the Nintendo games and fit many different playing conditions — all it will take is a little practice.

Now everyone can play with power!

BEFORE USE ASSEMBLY

Installation and Removal of the Sip and Puff Tubing

Before attempting operation of the HFC, you will need to install the Sip and Puff tubing. This was done to supply you with the cleanest tubing possible.

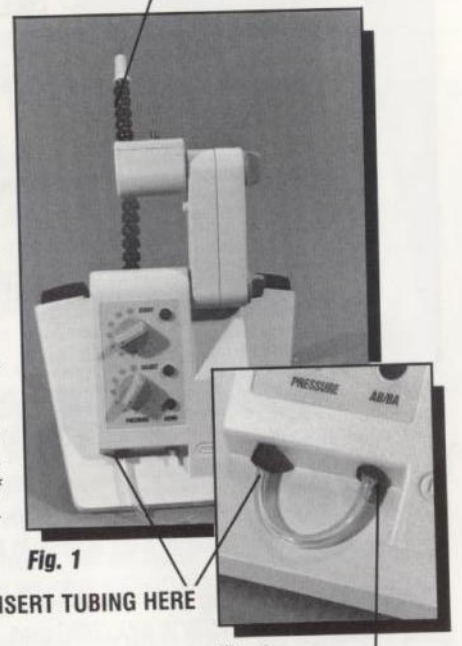

Fig. 1

Fig. 2

Installation

1. *Straighten the black articulating tubing as shown in Fig. 1. The straighter the tubing, the easier the installation will be.*
2. *Open the Zip-Lock bag and remove the clear tubing. Insert the tubing into the black hex nut hole on the lower left side of the housing. (See Fig. 1 and 2.)*

   A light twisting action (roll the tubing between your fingers as you push it in) will help the tubing go in easier.
3. *When you see 2" of tubing come through the end of the black articulation tube, stop and connect the end of the remaining tubing to the right connector. (See Fig. 2.)*

This same procedure should be used whenever removing or replacing the Sip and Puff tubing.

■ ***IMPORTANT*** — Leave a loop in the tubing as shown in Fig. 2.

Removal

1. *Straighten black articulating tubing.*
2. *Disconnect tubing from bottom of housing, right connector.*
3. *Slowly pull tubing out (through the bottom of the HFC).*

OPERATION AND CONTROLS

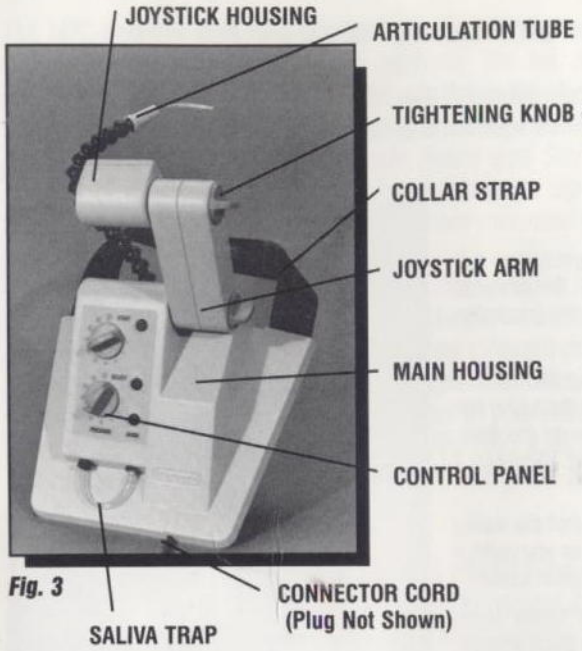

Fig. 3

ARTICULATION TUBE (Fig. 3) *— Contains the Sip and Puff tubing. The articulation tube can be adjusted to allow easy access to the Sip and Puff tube.*

TIGHTENING KNOBS (Fig. 3) *— These two knobs are used to make adjustments to the position of the JOYSTICK HOUSING and JOYSTICK ARM. Simply loosen the knobs (counterclockwise) and adjust the arm and joystick to the position you want. Then re-tighten the knobs (clockwise) to lock everything in place. The knobs can only be loosened a few turns and can't be removed from the HFC. Tighten the knobs only as much as needed to keep the joystick housing and arm from moving. DO NOT OVER-TIGHTEN!*

JOYSTICK ARM (Fig. 3) *— Used to adjust the location of the joystick housing. Rotate the arm to bring the joystick housing into a comfortable position.*

CONNECTOR CORD (Fig. 3) *— For plugging the HFC into the Control Deck.*

COLLAR STRAP (Fig. 3) *— Used for wearing the HFC around the neck. The collar strap comes in two halves and attaches together with a velcro[1] strip.*

MAIN HOUSING (Fig. 3) *— Houses the electronics and supports the joystick arm and the joystick housing. The back side is covered with foam for comfort when worn on the chest.*

SALIVA TRAP (fig. 3) *— Collects saliva and moisture from your breath. To clean, pull the end of the tubing off the right connector and blow on the other end of the tubing. (More details on cleaning are explained in the Care and Cleaning section.)*

JOYSTICK HOUSING (Fig. 4) *— Houses the switches for the joystick and the indicator lights. The joystick has 8-way movement, meaning it can move video game characters in eight different directions — up, down, left, right and the four diagonals.*

When using the joystick, only a slight movement of the jaw or head will be necessary for you to feel a small "snap" as the switches make contact. No more movement than this is necessary for proper operation.

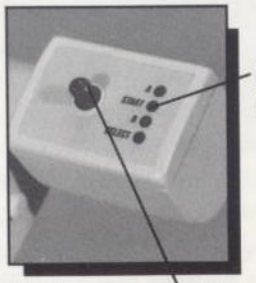

Fig. 4

NOTE: Many games use less than eight directions with the joystick. Please refer to the "Controller Operating Instructions" for each game pak before you begin playing.

INDICATOR LIGHTS (Fig. 4) *— These tell you when one of the buttons is being activated. A slight sip or puff will cause the A and B lights to go on, and a stronger sip or puff will cause the A* ***and*** *Select (or start) indicator light to go on. When activating Select or Start, two indicator lights will always go on together.*

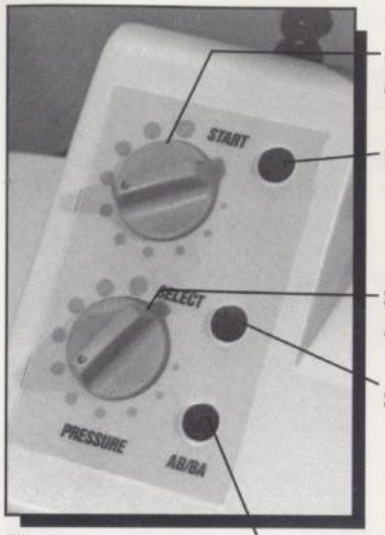

Fig. 5 AB/BA MODE SWITCH

CONTROL PANEL (Fig. 5) *— Used to set up the pressure and mode of the HFC. The SELECT and START Buttons work the same as on a standard NES controller where the Start button can be used at any time to "Pause" the game. The front access to the Select and Start are best used while learning to operate the HFC.*

SELECT and START PRESSURE ADJUSTMENT KNOBS (Fig. 5) *— Used to adjust the amount of pressure (or vacuum) necessary to activate the Select and Start "buttons." Rotate the knobs clockwise to the larger blue dots to increase the amount of Sip and Puff pressure needed to use. If the knobs are turned all the way to the smaller blue dots (counterclockwise), the A, B, Select, and Start buttons will probably go on at the same time. Some experimentation is necessary when first starting a game to know where to set the pressure adjustment knobs. After some use, you will probably find a comfortable setting that works for most of your games.*

AB/BA MODE SWITCH (Fig. 5) *— This two-position switch is used to change the mode of the Sip and Puff switch. You can have either the A turn on when you sip and B turn on when you puff, or, by pressing the AB/BA switch, the A will be Puff and B will be Sip.*

The AB/BA switch simply reverses the operation of Sip and Puff, no matter which game you are playing.

*NOTE: The AB/BA Mode Switch has **no** effect on the Select and Start Sip and Puff operation mode.*

FITTING AND ADJUSTMENTS

Fig. 6 OPTIONAL CHEST STRAP

*The NES Hands Free Controller is designed to fit a variety of different people and needs. In most cases, the best way to wear the HFC is shown in Fig. 6. Pass the long side of the collar strap around your neck and attach it to the short collar strap by the velcro[1] strip. The higher on the chest you wear the HFC, the more stable it will be. If you need to wear the HFC in a position where it moves too much, use the chest strap to help stabilize it (See Fig. 6). Attach the chest strap to the locking strips on the **back** of the HFC (one of the two) with the velcro[1] strip. You will probably have to try a few different strap adjustments to find the best method for you.*

If you are using a trachea (windpipe) tube with the HFC, you might try to put the tube over one of the flat flanges on the right or left side of the main housing. If this won't work or is uncomfortable, then wear the HFC over the trachea tube and cut some blocks of foam (not provided) and attach with velcro[1] to the locking strips on the back of the HFC. Put one piece on each side of the tube. This should hold the HFC far enough away from your chest to keep it from rocking back and forth on the trachea tubing.

[1] Velcro® Brand Fasteners

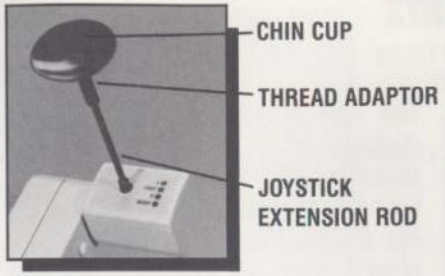

Fig. 7

The most critical adjustment for proper use of the HFC is to the joystick arm and joystick housing. First, select one of the joystick extension rods and thread it into the top of the joystick housing (see Fig. 7). The longer the extension rod, the more movement will be necessary to move the joystick around. Try the middle length (3½") first until you get used to using the HFC. Next, choose the type of joystick end you like best. The HFC comes with a chin cup, a hard plastic ball and a foam cover for the ball. If you use the chin cup, you first need to thread on the thread adaptor (see Fig. 7). It is a black hex-shaped "nut" about 3/4" long. After threading on the extension rod and joystick end, tighten them all securely.

WARNING: If a young child is using the NES Hands Free with the hard plastic ball on the joystick end, an adult should *tighten* it *securely* before use.

Finally, loosen the two tightening knobs on the joystick arm and adjust the arm and joystick housing into a position for using the HFC as shown in Fig. 6. Re-tighten the knobs finger-tight, so that the joystick arm and housing will not move. You will have to try a few different positions to find one that is the most comfortable. It is probably best to adjust the HFC so that your chin is slightly resting against the joystick end. Before finally using the HFC, adjust the aticulation tube so that the end of the Sip and Puff tubing is in or near your mouth. Move it into a position that is the most comfortable for you.

CONNECTING THE NES HANDS FREE TO THE CONTROL DECK™

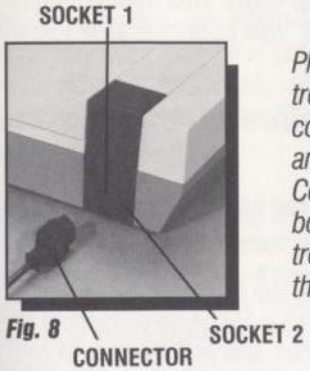

Fig. 8

Plug the connector from the HFC into the Control Deck socket as shown in Fig. 8. If it is connected to socket 1, it becomes Controller 1, and if it is connected to socket 2, it becomes Controller 2. This distinction is important for both 1 and 2 player games since only the controller plugged into socket 1 will be able to use the Select and Start feature.

The HFC can be used together with any other type of controller available for the Nintendo Entertainment system, as well as another NES Hands Free Controller.

You are now ready to use the NES Hands Free Controller. Simply plug it into the Control Deck, select and insert a game pak and turn the power on.

Additional Hints For Operation

- *Before you start a new game, be sure to look at the instructions and button functions for that game. Each one is a little different and may take some getting used to.*
- *On games where you need to hold a button in the "on" position for a long time (such as driving games), you might want to use the AB/BA mode switch to allow you to keep the pressure (puff) in your mouth to activate the button. This is usually easier than sipping over long periods.*
- *If you are in a wheel chair, instead of using the chest strap around your chest, it may be easier to put adhesive-backed velcro' on the armrests or tubes of your chair. Then attach the ends of the chest strap to the back of the HFC and the ends of the strap to the velcro' on your chair.*

CONT.

- *For applications where you are **not** actually wearing the HFC, you can use the two locking strips on the back of the HFC to help keep it from moving. Simply mount the HFC to a flat surface that has a "loop" type cloth material or velcro[1] adhered to it.*
- *If you want to use the chin cup but find it is too slippery, put some strips of cloth tape over it.*
- *If you have a beard, you might try to use the ball with the foam cover while using the joystick.*
- *On some games it is necessary to press and hold two buttons at the same time (i.e, during "design modes" or in order to restart a game where you left off). To do this with the HFC, you can use the Sip and Puff Tube to activate the A or B button and then press the button for the Start or Select mounted on the front control panel.*
- *If you want to make your own custom joystick covers or adapters, you can use either the 6-32 threaded end of the extension rods or the 8-32 internal thread adaptor (provided).*
- *Try several different joystick angles and positions to get the best results from the HFC. When you first learn to play, try the longer joystick extension rods so that you can see the indicator lights more easily. After some practice, try using the shortest extension rod as it will give you the quickest joystick action.*
- *If you are playing for a long period of time, take a 10-15 minute break at least once an hour.*

CARE AND CLEANING

*During normal use, it is necessary to occasionally drain the HFC to maintain proper operation. Every **two hours,** remove the Sip and Puff tube from the right connector and blow out any accumulated liquid. Reattach the tubing when finished. Additionally, after each use, remove the tubing from the HFC and rinse it out with water. (See Page 3 for Tubing Removal and Replacement instructions.)*

*If the Sip and Puff tubing becomes worn, yellowed or cloudy, it is time for replacement. You can order replacement tubing directly from Nintendo (see Page 16), or buy it from a hardware, pet store, or medical supply store. The size **must** be 1/8" inside diameter × 3/16" outside diameter × 21" long. If you buy it at a hardware or pet store, remember to clean it out thoroughly before use.*

Fig. 9

For total cleaning of the HFC (such as when sharing with another person) or regular maintenance, it is necessary to take the HFC apart. Remove the two Phillips head screws and washers on the back, and remove the back cover (see Fig. 9).

WARNING: Remove the back carefully — it is attached with wires. Do not touch the PC Board.

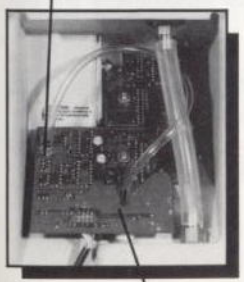

Fig. 10

*Once inside, **very** carefully remove the 10" piece of tubing from the upper left corner of the PC Board. Then pull the tubing off of the connector near the bottom of the PC Board (through the oval hole). Reverse this procedure for reassembly, making sure you loop the tubing over the large (1/2") clear tube. Clean and dry the tubing before replacement (see Fig. 10).*

WARNING: Do not put any object inside or attempt to clean out the metal pressure tube. If any liquid is inside the tube, allow it to dry thoroughly before reassembly.

All the clear tubing can be cleaned by boiling in water or by flushing in a mixture of one part bleach and five parts water. Rinse completely and allow to dry before reassembly.

*To replace the back panel, hook the two metal tabs behind the flange at the top of the housing. Then, replace the two screws and washers in the bottom. It is **very** important to properly attach the top of the HFC back panel. To ensure that the panel has been properly attached, gently pull back on the collar straps to see if the back panel moves or comes off. Reattach if necessary.*

Precautions and Care

- *Avoid exposure to high temperature, humidity, severe shocks or cold.*
- *Keep in a clean, dry place. Wipe off any liquid or foreign substances as soon as possible, especially around the joystick.*
- *Use a soft, **slightly** damp cloth to remove any stains. Do not use alcohol, abrasives or solvents to clean the HFC. Use water only.*
- *When disconnecting the HFC from the Control Deck, grasp the connector and pull slowly. Do not pull on the cord as damage may result.*
- *Do not force the joystick arm or rotate the joystick housing past the built-in stops.*
- *Make sure there is a small "loop" of Sip and Puff tubing showing at the bottom of the housing. Clean it out as soon as liquid appears inside.*

IF THE NES HANDS FREE DOES NOT OPERATE

The following troubleshooting problems are for the NES Hands Free Controller only — please make sure that you have already tested the Control Deck for problems (by using it with the NES Controllers) and followed the troubleshooting guide in the Control Deck Manual.

Symptom	Possible Problem/Remedy
The Indicator lights on the joystick housing work correctly but you have no effect on game play and the HFC does not seem to work.	The HFC Connector is plugged into socket 2 on the Control Deck. Plug the connector into socket 1. You are playing a 2-player game and the "other" player is in Play mode.
A game starts and goes into "pause" mode by itself.	The Select and Start pressure adjustment knobs are set too low. Turn the knobs clockwise (to a larger blue dot).
The A and B functions on a game work properly but you can't use the Select or Start.	The Select and Start pressure adjustment knobs are set too high. Turn the knobs counter-clockwise (to a smaller blue dot).
The A or B indicator light is on and will not turn off.	The HFC needs recalibration, see page 14. There is liquid in the Sip and Puff tubing. Remove and clean it out. There is liquid in the pressure switch or internal tubing. Open the back panel and clean the tubing. Allow the pressure tube to dry out before reassembly (see Care and Cleaning section).
A, B, Select and Start work but joystick doesn't.	Try a different game. If problem persists, call Nintendo.

If you are still unable to solve any problems, please call our NES Consumer Service Department at 1-800-255-3700.

RECALIBRATION

Because of high elevation, seasonal changes or continuous use, the HFC may occasionally need to be recalibrated. You can tell if recalibration is necessary when the indicator lights on the top of the joystick housing stay "on" or when sipping and puffing seem to have no effect in turning the A and B lights on or off.

To recalibrate the HFC:

1. *Insert a game pak into the Control Deck, plug the HFC into socket 1, and turn the Control Deck power on.*
2. *Make sure the AB/BA switch is in the "out" position and the Select and Start adjustment knobs are turned to the biggest blue dot (full clockwise).*
3. *Using the small screwdriver provided, adjust the two screws on the back panel of the HFC while looking at the indicator lights on the joystick housing.*

   First turn the A adjustment screw clockwise five full turns (the A light will go out). Then turn the B adjustment screw counterclockwise five full turns (the B light will go out). It is important that both the A and B indicator lights are off before proceeding to the next step.
4. *Slowly turn the A adjustment screw counterclockwise until the A indicator light just comes on, then turn the screw back (clockwise) until the A light just goes out — but **not** flickering. Turn the B adjustment screw clockwise until the B light just comes on and then turn the screw back (counterclockwise) until the B light just goes out, but not flickering.*
5. *All lights should now be off. Test the sensitivity of the Sip and Puff operation by sipping and puffing into the tube and watching the A and B lights go on and off. If they are difficult to operate (requiring a lot of pressure) or still remain on, then repeat steps 2-5 or adjust as follows:*
   - *A light difficult to activate: Turn A adjustment screw counterclockwise*
   - *A light stays on: Turn A adjustment screw clockwise*
   - *B light difficult to activate: Turn B adjustment screw clockwise*
   - *B light stays on: Turn B adjustment screw counterclockwise*

SECTION 2 — WARRANTY AND SERVICE

90-DAY LIMITED WARRANTY

Nintendo of America Inc. ("Nintendo") warrants to the original consumer purchaser that the NES Hands Free shall be free from defects in material and workmanship for a period of 90 days from the date of purchase. If a defect covered by this warranty occurs during this 90-day period, Nintendo will repair or replace the defective NES Hands Free or component part, at its option, free of charge.

To receive this warranty service:

1) Notify the Nintendo Consumer Service Department of the problem requiring warranty service by calling: 1-800-255-3700. Our Consumer Service Department is in operation from 4 A.M. to 10 P.M. Pacific Time, Monday through Saturday. **Please do not** send your defective components to Nintendo before calling the Nintendo Consumer Service Department.

2) If the Nintendo service representative is unable to solve the problem by phone, you will be provided with a Return Authorization number. You must record this number on the outside packaging of your defective NES Hands Free, and return your NES Hands Free **FREIGHT PREPAID, INSURED FOR LOSS OR DAMAGE,** together with a copy of your original invoice within the 90-day warranty period, to:

   Nintendo of America Inc.
   NES Consumer Service Department
   4820 150th Avenue N.E.
   Redmond, WA 98052

This warranty shall not apply if the NES Hands Free has been damaged by negligence, accident, unreasonable use, commercial use, modification, tampering, or other causes unrelated to defective materials or workmanship, or if the serial number has been removed or defaced.

REPAIRS AFTER EXPIRATION WARRANTY

If the NES Hands Free develops a problem requiring service after the 90-day warranty period, you may contact the Nintendo Consumer Service Department at 1-800-255-3700 (4:00 A.M. to 10:00 P.M., Pacific Time, Monday through Saturday). If the Nintendo service representative is unable to solve the problem by phone, you will be advised of the approximate cost for Nintendo to repair or replace the NES Hands Free and a Return Authorization number will be given to you.

You must then record this number on the outside packaging of the defective NES Hands Free and return the defective merchandise, **FREIGHT PREPAID, INSURED FOR LOSS OR DAMAGE,** to Nintendo, and enclose a money order payable to Nintendo of America Inc., for the cost quoted you. (Repairs may also be charged on a VISA or MASTERCARD credit card.)

If after personal inspection, the Nintendo service representative determines the NES Hands Free cannot be repaired, it will be returned and your payment refunded.

WARRANTIES LIMITATIONS

ANY APPLICABLE IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY LIMITED TO NINETY DAYS FROM THE DATE OF PURCHASE AND ARE SUBJECT TO THE CONDITIONS SET FORTH HEREIN. IN NO EVENT SHALL NINTENDO BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES RESULTING FROM THE BREACH OF ANY EXPRESS OR IMPLIED WARRANTIES.

The provisions of this warranty are valid in the United States only. Some states do not allow limitations on how long an implied warranty lasts or exclusion of consequential or incidental damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

NES HANDS FREE CONSUMER PARTS LIST & ORDER FORM

Nintendo Part No.	Part Name	Price	Qty	Amount of Purchase
8723	Pressure Adjustment Knob	$ 1.00		
11207	Chest Strap	3.00		
20643	Sip and Puff Tubing Set (21″ and 10″ × 1/8″ I.D.)	1.00		
11200	2″ Extension Rod	1.00		
8363	3½″ Extension Rod	1.00		
11216	5″ Extension Rod	1.00		
8635	Thread Adaptor (6-32 to 8-32)	1.00		
11204	Joystick Chin Cup	1.00		
8633	Joystick Ball	1.00		
8634	Joystick Ball Cover (Foam)	1.50		
19409	Instruction Manual	1.75		
19399	Screwdriver	1.00		
			SUBTOTAL	
			WASHINGTON STATE RESIDENTS ADD 8.1% SALES TAX	
			POSTAGE & HANDLING ($2 for order of $4 or more, $0.50 for orders of less than $4)	
99002			TOTAL AMOUNT DUE	

To Order by Phone (Requires VISA or MASTERCARD) Call: 1-800-255-3700, 4:00 A.M. to 10:00 P.M., Pacific Time (Monday to Saturday). Please have your VISA or MASTERCARD number and expiration date ready.

To Order by Mail, Please Complete the Following:

1. Name _____ Phone ( ) _____
   Street Address _____
   City _____ State _____ Zip _____
2. Enclose Money Order or Credit Card Auhorization for Total Amount Due.
   If paying by VISA or MASTERCARD:
   Please charge total amount due of $ _____ to my: ☐ VISA ☐ MASTERCARD
   CARD # _____ Expiration Date _____
   Name on Card (Print) _____
   Signed _____
3. Mail to: **Nintendo of America Inc., P.O. Box 97032, Redmond, WA 98073-9732**

Allow 6-8 weeks for delivery. We cannot accept cash, personal checks, or C.O.D. orders. Prices are applicable within the United States only and are subject to change without notice.